

## Description

# *[Apparatus For Practicing The Golf Putting Stroke]*

### BACKGROUND OF INVENTION

[0001] This invention relates to the practice of golf putting and specifically to golf putting training aid or training devices related to aiming down the proper target path and proper putter head alignment throughout the putting stroke.

[0002] Golfers worldwide strive to lower their golf scores and devote hours of practice on the art of putting as a means to achieving their goal. Recognizing the needs of players on all levels, training aid devices have been developed to assist the players in their quest. Many of the prior inventions focus on practicing indoors and fail to consider the importance of practicing in a real world setting outdoors of the practice green. Conversely, those inventions that do address the outdoor setting fail to consider the need for a lightweight and easily portable device that can be rapidly disassembled, stored and carried from the practice green

to the course when called to the first tee for their round of golf.

[0003] For example US Pat. No. 6,679,783 shows a golf-training device that provides a means of practicing indoors on a synthetic putting surface. The device consists of a synthetic putting surface, two opposing platforms placed on either end of said putting surface and each platform host mounting pins to which a predetermined length of line is affixed. Although this device works well on an indoor synthetic surface it has no utility outdoors. Additionally, the device does not provide for extension and or retraction of the fixed length line, it is not easily portable due to the size and weight.

[0004] Another example of a known putting stroke teaching aid device is US Pat. No. 6,048,273. This device consist of two counter weighted standards to which one standard has a reel attached. The reel houses an extendable line that can be stretched from one standard to the opposing standard. Each standard has counter weights attached to stabilize said standards when placed on the practice green. Although this device works well it fails to meet the rapid disassembly, storage and portability issues golfers require when called from the practice area to the first tee. The

weight and size of this device will discourage the average golfer from using this aid when preparing for and practicing prior to a round of golf. Overall this device is cumbersome, extremely heavy and therefore lacks the lightweight portability needs of the golfer.

#### **SUMMARY OF INVENTION**

[0005] It is the intent of this invention to: a) Provide golfers with a retractable putting line aiming/alignment device that is portable, lightweight and a highly effective extendable, retractable line mechanism wherein the line being positioned above the putting surface provides the golfer an unobstructed putting stroke and immediate visual feedback regarding the ideal square at impact putter head contact.

[0006] b) Provide a means of placing the retractable putting line aiming/alignment device anywhere on the putting surface such that the retractable putting line aiming/alignment device and opposing stake can be placed into the surface of the putting green and used as a target, allowing the golfer to pick any position on the putting surface to which he or she prefers to practice.

[0007] c) Provides a means of adjusting the retractable putting line aiming/alignment device by vertically extending and

retracting the line along the intended target path at a desired distance chosen by the user. The extendable / retractable line mechanism contained in the housing provides the necessary line tension to prevent the line from sagging when the line is extended and further allows for internal storage of the line thereby preventing line snags or tangles when the device is not in use.

[0008] d)Provides a means of practicing correct posture throughout the putting stroke allowing the golfer to overcome the dominant eye effect when putting. The user will immediately be afforded the ability to look directly down over the line, the golf ball and along the target line to prefect the proper straight back, straightforward and square at impact putting stroke.

[0009] e)Provides the golfer a lightweight easy to assemble device that can be used prior to a round of golf and an easily portable device that can be rapidly disassembled, stored and carried from the practice green to the course when called to the first tee for their round of golf.

[0010] f)Provides a means of practicing and honing the art of putting in a real world setting outdoors of the practice green thereby the golfer can work on all elements of the putting stroke including the alignment, feel of the green

and most importantly the proper technique in order to improve their game and lower their scores.

[0011] In accordance of the above objectives the advantages of this invention are the distinguishable benefits of a lightweight, portable and highly effective means of providing an extendable/retractable target putting line aiming/alignment line to be used on an actual golf green putting surface. The retractable putting line aiming/alignment device is inserted into a golf green surface, via a housing stake assembly and opposing stake mounted at a user desired distance.

[0012] The apparatus includes: a housing, simulating a golf ball, which houses an extendable / retractable line mechanism; a stake assembly to secure the housing into position on the putting green; and a corresponding and opposing stake to be inserted into the putting green, to attach the receiving extended line.

[0013] The apparatus is placed into position on a putting green surface at or near the golf hole and the opposite line end is extended and secured to the opposing stake placed into the putting green at a desired distance from the hole or visa versa.

[0014] The extendable / retractable line mechanism provides the

necessary line tension to prevent the line from sagging when extended. The extended putting line represents the target path or reference for aligning a putter with respect to the target hole enabling the user to enhance the practice of proper alignment through the putting stroke.

[0015] The advantages realized as a result of this invention are numerous. An example would be the ability to accurately visualize the proper target line allowing the golfer to overcome the dominant eye effect when putting. Additionally, the extendable/retractable target putting line provides a means of practicing correct posture throughout the putting stroke. The user will immediately be afforded the ability to look directly down over the line, the golf ball and along the target line to prefect the proper straight back, straightforward and square at impact putting stroke.

[0016] Further advantages of this invention will become obvious after review of the following drawings and the corresponding description of the drawings

#### **BRIEF DESCRIPTION OF DRAWINGS**

[0017] Figure 1 shows a perspective side view of the preferred embodiment

[0018] Figure 2 shows a perspective view of the preferred embodiment with golf ball, putter and defined target line

- [0019] Figure 3 is the same as figure 2 with the putting stroke resulting in an open clubface and missed target line path
- [0020] Figure 4 is the same as figure 2 with the putting stroke resulting in an closed clubface and missed target line path
- [0021] Figure 5 shows a perspective view of the housing and housing stake embodiment in the stored position
- [0022] Figure 6 shows a perspective view of the housing and housing stake embodiment in the locked position
- [0023] Figure 7 shows an expanded view of the device housing exposing the internal components

[0024] *REFERECED NUMBERS IN DRAWINGS*

[0025] *1 Assembled Putting Line Housing*

[0026] *2 Putting Green Surface*

[0027] *3 Putter*

[0028] *4 Golf Ball*

[0029] *5 Target Hole*

[0030] *10 Assembled Putting Line Housing Stake*

[0031] *11 Opposing Putting Line Stake*

[0032] *12 Opposing Putting Line Stake Hook*

[0033] *14 Retractable Aiming/Alignment Putting Line*

- [0034] *15 Putting Line Attachment Pull Ring*
- [0035] *16 Opposing Putting Line Stake Depth Indicator Step*
- [0036] *17 Open Putter Face Target Line*
- [0037] *18 Closed Putter Face Target Line*
- [0038] *19 Putting Line Housing Recessed Compartment*
- [0039] *20 Metal Stake Component*
- [0040] *21 Metal Stake Base Attachment Component*
- [0041] *25 Lower Ball Body With Tee Component*
- [0042] *26 Upper Ball Body Component*
- [0043] *31 Line Housing Bottom Plate Component*
- [0044] *32 Line Housing Component*
- [0045] *33 Metal Spring Assembly*
- [0046] *34 Brass Ring*

#### **DETAILED DESCRIPTION**

- [0047] *Figure 1* reflects the assembled and ready for use retractable putting line aiming/alignment device. The retractable putting line aiming/alignment device constructed in accordance with the embodiment of the



present invention includes an assembled putting line housing 1 with the assembled putting line housing stake 10 attached and inserted at a distance determined by the user from the target hole 5 into the putting green surface 2.

[0048] The opposing putting line stake 11 is inserted directly behind the target hole 5 and into the putting green surface 2 at a depth equal to the opposing putting line stake depth indicator step 16.

[0049] When the assembled putting line housing 1, the attached assembled putting line housing stake 10 and the opposing putting line stake 11 are properly positioned the retractable aiming/alignment putting line 14 can be extended and attached via the putting line attachment pull ring 15 to the opposing putting line stake hook 12.

[0050] The user can therefore position the golf ball 4 on the putting green surface 2 directly below the retractable aiming/alignment putting line 14. The user can then address the golf ball 4 with the putter 3 and when the golf ball 4 and putter 3 are viewed from the addressed position as shown in *Figure 2* the user will receive immediate visual feedback regarding proper putter 3 actual directional aiming and alignment. Additionally, when the golf ball 4 is

struck by the putter 3 during the putting stroke the resulting roll of the golf ball 4 along the target path, as presented by the extended referenced retractable aiming/alignment putting line 14 provides immediate visual feedback if the putter 3 is square at impact.

[0051] The user can focus on practicing the straight back, straight forward putting stroke by visually concentrating on the movement of the putter 3 during the putting stroke to insure said movement of the putter 3 is directly in line with and square to the retractable aiming/alignment putting line 14. As shown in *Figure 3*, if the putting stroke results in a open putter 3 face the resulting path of the golf ball 4 will travel on a open putter face target line 17 therefore resulting in a missed putt. As shown in *Figure 4*, if the putting stroke results in a closed putter 3 face the resulting path of the golf ball 4 will travel on a closed putter face target line 18 therefore also resulting in a missed putt. The continued practice of said putting stroke as illustrated in *Figure 2* will create muscle memory to insure a proper square at impact stroke can be duplicated on the course thereby improving ones chances of sinking more putts and lowering ones score.

[0052] *Figure 5* illustrates the compact nature of the embodiment

by allowing the user to store the assembled putting line housing stake 10 into the putting line housing recessed compartment 19 of the assembled putting line housing 1. The convenience of storing the assembled putting line housing stake 10 prevents damage to the assembled putting line housing stake 10 and the assembled putting line housing 1.

[0053] *Figure 6* illustrated the ability to remove the stored assembled putting line housing stake 10 from the putting line housing recessed compartment 19, as illustrated in *Figure 5*, of the assembled putting line housing 1 and thereby allowing the user to assemble the putting line housing stake 10 into the locked, assembled and ready to use position. Once assembled the assembled putting line housing 1 and the assembled putting line housing stake 10 can be inserted into the putting green surface 2.

[0054] Turning attention to *Figure 7* the detailed construction, in accordance with the embodied device is defined as follows. The constructed assembled putting line housing stake 10 is defined as being made of two components; The metal stake component 20 is inserted into the Metal Stake Base Attachment Component 21. The assembly of these components makes up the assembled putting line

housing stake 10 which can then be assembled as illustrated in *Figure 6* or stored as illustrated in *Figure 5*.

[0055] Further the assembled putting line housing 1 device is constructed embodiment components made up of a line housing component 32 to which a metal spring assembly 33 and line housing bottom plate component 31 are attached in order to establish the assembled reel and spring component of the embodiment. Once the assembled reel and spring component of the embodiment are assembled the retractable aiming/alignment putting line 14 can be warped around the line housing component 32. The assembled retractable aiming/alignment putting line 14, line housing bottom plate component 31, line housing component 32, metal and spring assembly 33 are then affixed to the lower ball body with tee component 25. The retractable aiming/alignment putting line 14 is threaded through the brass ring 34 that is then attached to the lower body with tee component 25. All internal components when assembled and secured are then encapsulated with the attachment of the upper ball body component 26 as it is affixed to the lower ball body with tee component 25. The resulting assembling, representing the assembled retractable aiming/alignment putting line 14, line housing

bottom plate component 31, line housing component 32, metal spring assembly 33 and brass ring 34 of the internal embodiment components, to the lower ball body with tee component 25 and upper ball body component 26 represent the assembled ready to use assembled putting line housing 1 device. Although the internal components as defined herein are one means of establishing an internal reel and spring component, there are various other approaches that when employed can perform the same function. It is the intent of this invention to capture any means of establishing an internal reel mechanism that results in the ability to extend on retracts the assembled retractable aiming/alignment putting line 14. The size of the assembled putting line housing 1 is designed such that the length of assembled retractable aiming/alignment putting line 14 can be increased to any desired length or dimension during the production process.

[0056] *Figure 7* also reflects the attachment of a metal putting line attachment pull ring 15 component to the end of the retractable aiming/alignment putting line 14. The objective of the invention is to place the opposing putting line stake 11 into the putting green surface 2 at are near the target hole 5 at a depth equal to the opposing putting line stake

depth indicator step 16 thereby allowing the putting line attachment pull ring 15 to be attached to the opposing putting line stake hook 12. Once attached the assembled putting line housing 1 and corresponding retractable aiming/alignment putting line 14 can be extended to a desired distance from said target hole 5 and the attached assembled putting line housing stake 10 can be inserted into the putting green surface 2.

[0057] The advantages of the spring tension generated by the internal reel and spring assembly made up of the line housing bottom plate component 31, line housing component 32, and metal spring assembly 33 components provides adequate tension to prevent the retractable aiming/alignment putting line 14 from sagging when extended thereby keeping the retractable aiming/alignment putting line 14 parallel to the putting green surface 2. The advantages of using the stake approach as defined by this invention embodiment is it superior to all prior invention that use platforms to be placed on the putting green surface 2. The simplicity of the stake approach, coupled with the depth of the assembled putting line housing stakes 10 and opposing putting line stake 11 into the putting green surface 2 provides more than adequate tension strength

stability of the system in use and provides a rapid means of disassembly and storage provides an advantage over all other inventions.